

Work Order ID 65547

January 19, 2011 1:35:43 PM



Page 1

Item ID: D3650-3

Accept



Setup Start



Revision ID:

Item Name: Center Panel

Stop



Start Date: 1/20/11 Start Qty: 3.00



Cust Item ID:

Required Date: 1/31/11 Req'd Qty: 3.00



Customer:

Reference:

Approvals: Process Plan: mf Date: 11-01-19 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
----------	--------------

D3650	Rev C
-------	-------

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3650

Dwg Rev: C

Prog Rev: C

2-Deburr if necessary

B11-1-07

(3)

110

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

B11-1-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 65547

January 19, 2011 1:35:44 PM



Page 2

Item ID: D3650-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Center Panel

Start Date: 1/20/11

Start Qty: 3.00



Cust Item ID:

Required Date: 1/31/11

Req'd Qty: 3.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

S 11/01/07

(x3)

130

NC BRAKE

0.00



Brake NC

Memo

0.00

Brake NC

1-Form as per Dwg D3650 using DT9426

2-bend as per dwg

SB 11/02/08

(3)

140

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

S 11/02/08

(x3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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NOTE: Date & initial all entries

Work Order ID 65547

January 19, 2011 1:35:44 PM



Page 3

Item ID: D3650-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Center Panel

Start Date: 1/20/11 Start Qty: 3.00



Cust Item ID:

Required Date: 1/31/11 Req'd Qty: 3.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160 	Large Fab	0.00							
Large Fab	Memo	0.00							
Large Fab	1-trim to fit (D3650-11)								
	2-Weld assembly as per dwg D3650 QSI004								
	3-grind weld smooth if necessary								
170 	QC9- Inspect visual per QSI004- Fusion Welds	0.00							
QC	Memo	0.00							
Quality Control									
180 	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

PC 11.02.24

PC 11.02.24

5/6/03/14

(X3)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 65547

January 19, 2011 1:35:45 PM



Page 4

Item ID: D3650-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Center Panel

Start Date: 1/20/11 Start Qty: 3.00



Cust Item ID:

Required Date: 1/31/11 Req'd Qty: 3.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Identify as per dwg & Stock Location: 189

0.00



Packaging

Memo

0.00

Packaging

11/3/15 JD 30

200

QC21 - Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/3/15 JD
CL 11/03/15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 19, 2011 1:35:43 PM

Page 1

Work Order ID: 65547

Parent Item: D3650-3

Parent Item Name: Center Panel



Start Date: 1/20/11

Required Date: 1/31/11

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP Rev:A New Issue 07-09-27 DD verified by: EC
 IPP Rev:B ECN 1113P 08-01-22 DD
 IPP Rev:C ecn1162 08-04-02 DD verified by: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3650-11 Filler Plate		Manufactured	No			160	Each	8.0000	1	3			
<u>Location</u> <u>Loc Qty</u> <u>Loc Code</u>													
WA 8													
43820 3													
45721 5													
M304S26GA 304/316 0.018 SHEET		Purchased	No			160	sf	109.6600	1.145	3.615789			
<u>Location</u> <u>Loc Qty</u> <u>Loc Code</u>													
MAT20 109.66													
109398 20.06													
112885 89.6													

Pl 11.02.24

(3)

181-1-24

(3)

112885

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

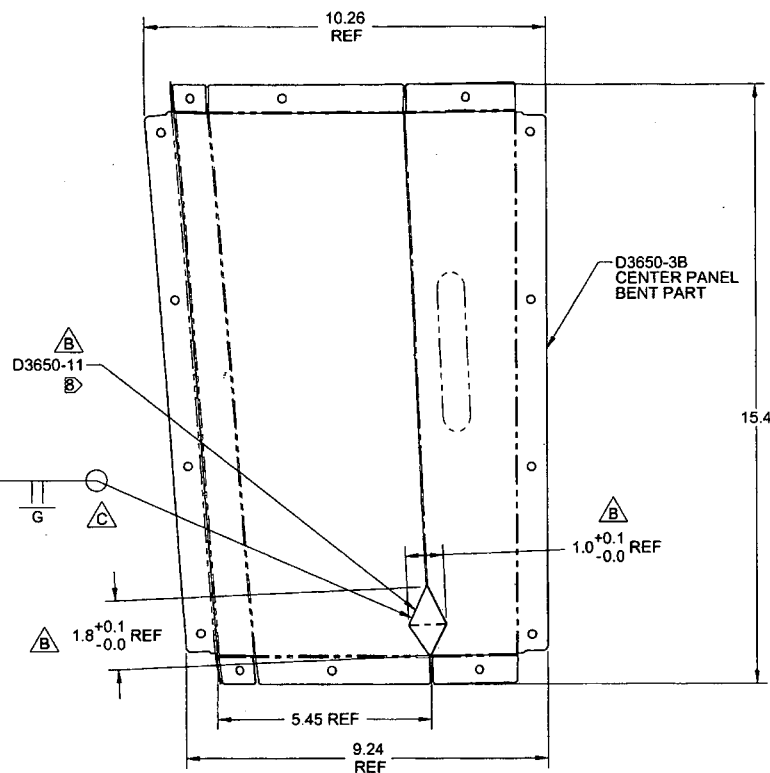
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

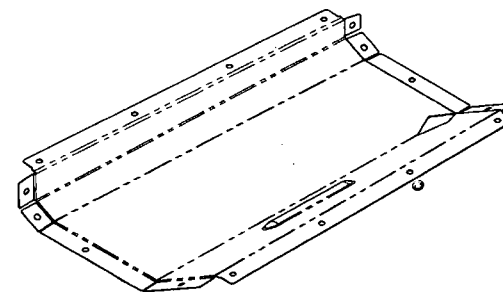
NOTE: Date & initial all entries

QTY -3	PART NUMBER	DESCRIPTION
X	D3650-3	CENTER PANEL
1	D3650-3B	CENTER PANEL BENT PART
1	D3650-11	FILLER PLATE

IT IS ACCEPTABLE
TO GRIND & LEAVE
0.03 FROM BOTTOM
FLAT SURFACE



D3650-3 CENTER PANEL
(LOOKING FROM OUT SIDE SURFACE)



655470

DEO ATTACHED

RELEASED
08.11.17

NOTES:

- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.0 lb
- 8) TRIM D3650-11 TO FIT AS REQUIRED

UNDER REVIEW

OK 07.02.05
08.06.14

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO. D3650	REV. C
MFG. APPR.	RF		SHEET 4 OF 9
APPROVED	RF	TITLE TOP PANEL ASSEMBLY	SCALE NTS
DE APPR.	RF		
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

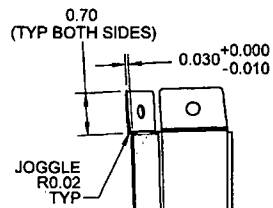
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

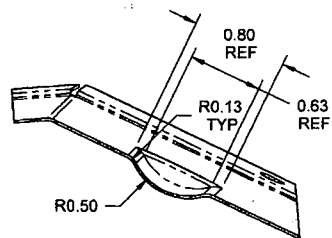
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

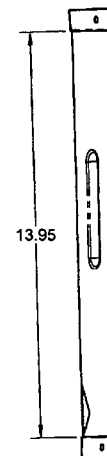
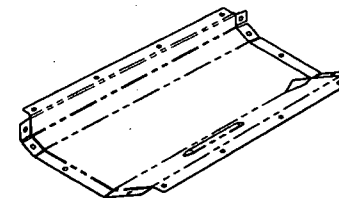
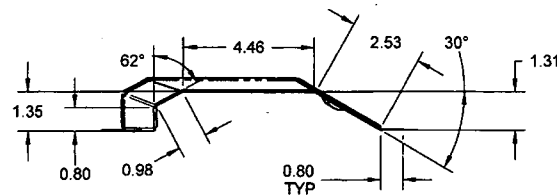
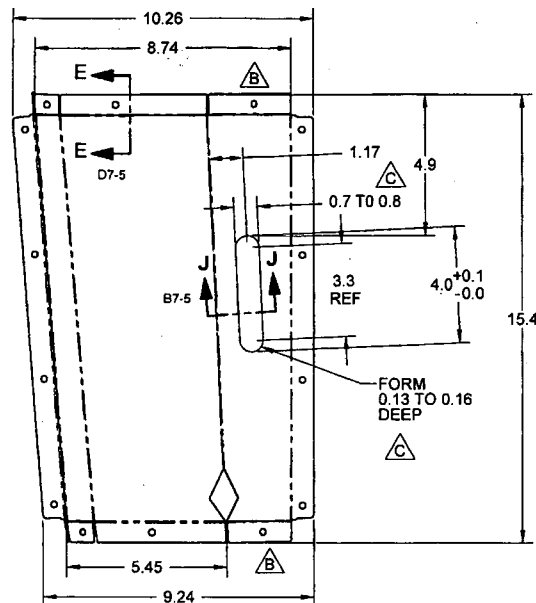
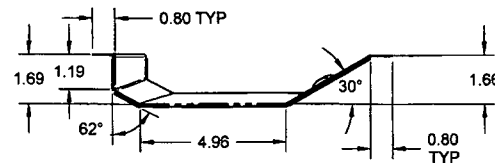
NOTE: Date & initial all entries



SECTION E-E D5-5
SCALE 2X



SECTION J-J C5-5
SCALE 3.5X



#65547





DEO ATTACHED

RELEASED

- NOTES:
- 1) FINISH: NONE
 - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 5) IDENTIFICATION: NONE

D3650-3B CENTER PANEL BENT PART
(MAKE FROM D3650-3F FLAT PATTERN)

UNDER REVIEW

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 5 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
DATE	08.10.14	COPYRIGHT © 2007 BY DART AEROSPACE LTD.	
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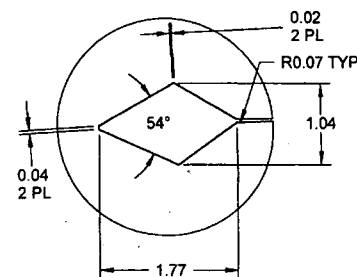
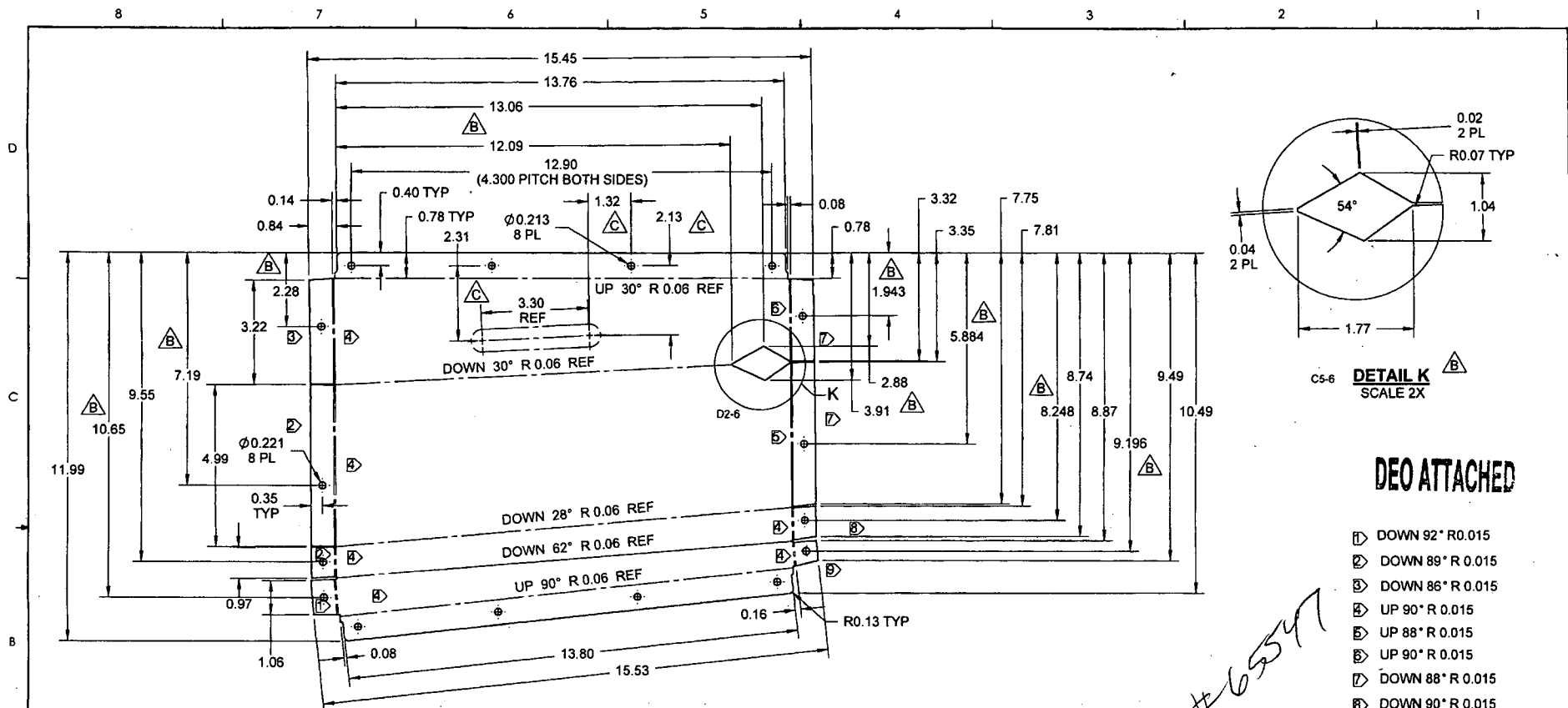
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



C5-6 **DETAIL K**
SCALE 2X

DEO ATTACHED

- ① DOWN 92° R 0.015
- ② DOWN 89° R 0.015
- ③ DOWN 86° R 0.015
- ④ UP 90° R 0.015
- ⑤ UP 88° R 0.015
- ⑥ UP 90° R 0.015
- ⑦ DOWN 88° R 0.015
- ⑧ DOWN 90° R 0.015
- ⑨ DOWN 94° R 0.015

#65547

D3650-3F CENTER PANEL FLAT PATTERN

D3650-3F NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA).
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE

UNDER REVIEW

OK 09.02.14

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	B	DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 6 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
DATE	08.10.14	<small>COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

RELEASED
08/11/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DRAWING NO. D3650	TITLE TOP PANEL ASSEMBLY	REV. C	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3650-C-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN CP	CHECKED	MFG. APPR.	APPROVED	DE APPR.			
DATE 09.06.12	DATE 04.06.15	DATE 09.06.15	DATE 09/06/15	DATE 09/06/15			

TO AMEND D3650-5 FWD PANEL:

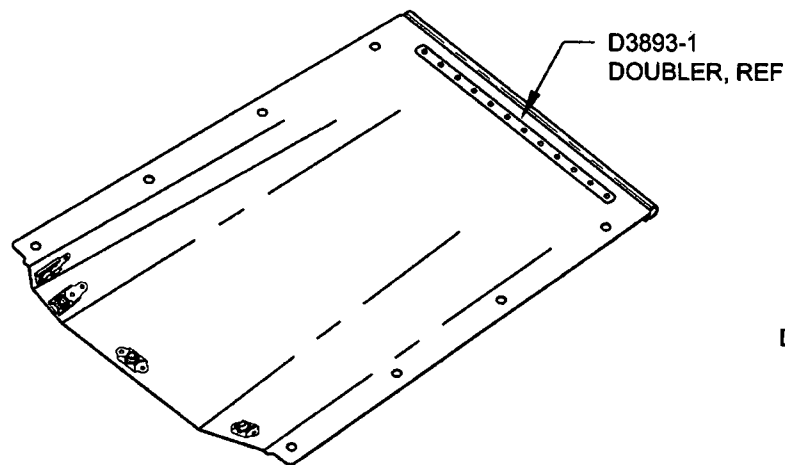
REF PAR 09-008. THE QTY(12) NAS1149CN432R WASHERS ARE REPLACED WITH QTY(1) D3893-1 DOUBLER. THE QTY(12) MS20615-4M5 RIVETS ARE REPLACED WITH QTY(12) NAS9307M-4-03 RIVETS. LOCATION OF THE DOUBLER IS SHOWN IN THE AMENDED DETAIL F (DWG SHEET 7) BELOW. THE PARTS LIST FOR D3650-5 IS AMENDED AS FOLLOWS:

IS:

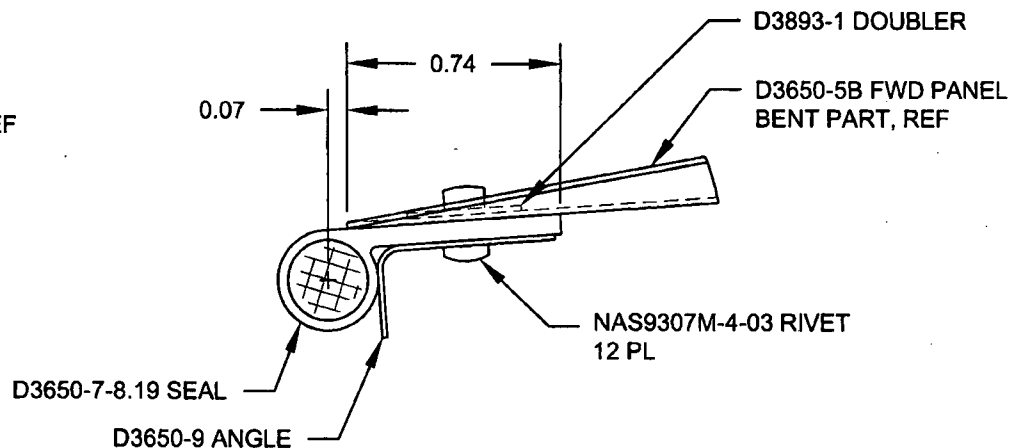
QTY -5	PART NUMBER	DESCRIPTION
1	D3893-1	DOUBLER
12	NAS9307M-4-03	RIVET (OR CR3523-4-03)

WAS:

QTY -5	PART NUMBER	DESCRIPTION
12	NAS1149CN432R	WASHER
12	MS20615-4M5	RIVET



D3650-5 FWD PANEL



DETAIL F C5-7
SCALE 3.5X

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order: 65547
Description: Center Panel		Part Number: D3650-3
Inspection Dwg: D3650	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.221	+0.005/-0.001	.224	x		V RB 02	
Ø0.213	+0.005/-0.001	.217	x		V	
0.40	+/-0.030	.401	x		V	
15.45	+/-0.030	15.45	x		T RB 01	
10.49	+/-0.030	10.49	x		T	
15.53	+/-0.030	15.53	x		T	
11.99	+/-0.030	11.99	x		T	
12.90	+/-0.030	12.90	x		T	
4.300	+/-0.010	4.303	x		V	
12.09	+/-0.030	12.09	x		T	
13.06	+/-0.030	13.06	x		T	
1.943	+/-0.010	1.940	x		V	
5.884	+/-0.010	5.888	x		V	
8.248	+/-0.010	8.249	x		PRO W5	
9.196	+/-0.010	9.199	x		PRO W5	
13.80	+/-0.030	13.80	x		T	
2.28	+/-0.030	2.277	x		V	
7.19	+/-0.030	7.187	x		V	
9.55	+/-0.030	9.543	x		PRO W5	
10.65	+/-0.030	10.643	x		PRO W5	
3.35	+/-0.030	3.353	x		V	

Measured by: RB	Audited by: S	Prototype Approval: N/A
Date: 10-1-27	Date: 10/1/27	Date: N/A

Rev	Date	Change	Revised by	Approved
A	08.04.17	New Issue	KJ/DD	RB

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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